Docket: 6759 Application Number: 09/635,911

Reply to Final O.A. of July 30, 2007

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) A method in a computer system for predicting a level of consumption of healthcare resources by modeling utilization of healthcare resources in a target period, the method comprising:
 - compiling a plurality of provider claims for each of a plurality of members of a health plan, wherein the provider claims for the plurality of members occur within a base period and include a plurality of health conditions or diseases;
 - storing a plurality of disease categories representing a plurality of health conditions or diseases;
 - storing category weight data, wherein the category weight data comprises a weight value associated with each stored disease category, wherein each weight value associated with a stored disease category represents an average incremental cost for a plan member associated with the presence of the associated stored disease category during the base period;
 - for each of the plurality of health plan members, identifying each stored disease category present in the plurality of provider claims for the member;
 - calculating a burden of illness score for each member based on the member's plurality of provider claims, wherein the burden of illness score is a number calculated by summing the stored weight values associated with each disease category identified in the member's provider claims identifying a number of selected disease or drug categories present in the plurality of provider claims for the member and calculating a weighted sum of the identified number of selected disease or drug categories;
 - computing a utilization score for each health plan member based on as a function of the burden of illness score and at least one explanatory variable, wherein the explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member; and

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using the utilization score to predict healthcare resource consumption in the target period by at least one plan member.

2-3. Canceled.

- 4. (Currently Amended) The method of claim 1 wherein the provider claims include only medical claims, and the disease categories are CCG categories.
- Canceled.
- 6. (Currently Amended) The method of claim 1 [[5]] further including, after the extracting step, the step of cleaning the provider claims data set to remove obviously erroneous information by comparing categories of the provider claims data set to acceptable values.

7-15. Canceled.

- 16. (Previously presented) The method of claim 1 further including, prior to the calculating step, determining the presence of a plurality of medical episodes in the plurality of provider claims and grouping the plurality of provider claims into one or more groups based on a medical episode.
- 17. (Previously presented) The method of claim 16 wherein the groups are Clinical Care Groups.

18-20. Canceled.

- 21. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the presence of a comorbidity in the member's plurality of provider claims.
- 22. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the presence of a complication in the member's plurality of provider claims.

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23. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the age of the member.

- 24. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the gender of the member.
- 25-26. Canceled.
- 27. (Original) The method of claim 1 wherein the at least one explanatory variable is a number indicating in which of a plurality of age categories the member belongs.
- 28. (Original) The method of claim 1 wherein the at least one explanatory variable is a number indicating the gender of the member.
- 29. (Currently Amended) The method of claim 1, wherein the explanatory variable is a factor that indicates a number of chronic claims representing a chronic disease for the member.
- 30. Canceled.
- 31. (Original) The method of claim 1 wherein the explanatory variable is a factor that indicates the recency of claims for the member.
- 32. (Currently Amended) The method of claim 1 wherein the explanatory variable is the sum of chronic medical costs from the pharmacy claims and the medical claims.
- 33. (Currently Amended) The method of claim 1 further including, after the computing step, the step of calculating a relative risk for the member of a group by dividing the utilization score by an average utilization score for the group.

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34. (Currently Amended) The method of claim 1 further including, after the computing step, the step of calculating a relative risk for the member of a group by dividing the utilization score by an average utilization score for a benchmark group.

- 36. Canceled.
- 37. (Currently Amended) The method of claim 1 [[36]], further comprising the step of identifying a high risk set of members by selecting the members having utilization scores that exceed a predetermined level.
- 38. Canceled.
- 39. (Currently Amended) The method of claim 1, further comprising, prior to the computing step, calibrating the model by comparing a computed utilization score against healthcare resource utilization for the a known target period.
- 40-42. Canceled.
- 43. (Currently Amended) The method of claim 1, further comprising, prior to the computing step, calibrating the model of by comparing a computed utilization score against healthcare resource utilization for a known target period, for only utilization due to chronic medical conditions.
- 44-48. Canceled.
- 49. (Currently Amended) A method in a computer system for determining consumption of healthcare resources by a plurality of plan members in a healthcare plan during a base time period, comprising:
 - compiling <u>pharmacy</u> claims <u>data</u> for each of a plurality members of a health plan, wherein the <u>pharmacy</u> provider claims for the plurality of members include a plurality of drug categories;

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storing a plurality of drug categories;

associated with each stored drug category, wherein each weight value associated with a stored drug category represents an average incremental cost for a plan member associated with the presence of the associated stored drug category during the base period;

- for each of the plurality of health plan members, identifying each stored drug category present in the plurality of pharmacy claims for the member;
- calculating a burden of illness score for each member based on the member's plurality of provider claims, wherein the burden of illness score is a number calculated by summing the stored weight values associated with each drug category identified in the member's pharmacy claims identifying a number of selected drug categories present in the member's claim data and calculating a weighted sum of the identified number of selected drug categories;
- computing a utilization score for each health plan member based on as a function of the burden of illness score and at least one explanatory variable, wherein the at least one explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member, and wherein the utilization score is a weighted sum of the at least one explanatory variable and the burden of illness score; and

using the utilization score to predict healthcare resource consumption by at least one plan member.

50-51. Canceled.

- 52. (Currently Amended) The method of claim <u>49</u> [[50]], wherein the target period is later in time than the base period.
- 53. (Currently Amended) The method of claim <u>49</u> [[50]], wherein the target period is the same time period as the base period.

54-56. Canceled.

- 57. (Currently Amended) The method of claim <u>49</u> [[50]], further including the step of cleaning the claim data to remove obviously erroneous information by comparing categories of the data set to acceptable values.
- 58. (Currently Amended) The method of claim <u>49</u> [[51]], wherein the <u>drug categories</u> health eonditions correspond to GC3 pharmacy classes.
- 59-62. Canceled.
- 63. (Currently Amended) The method of claim 49 [[50]], wherein pharmacy claims in the claim data are assigned to one of a plurality of groups based on a relationship to corresponding medical claims indicating the presence of the medical episode.
- 64-65. Canceled.
- 66. (Currently Amended) The method of claim <u>49</u> [[50]], wherein the associated burden weight for at least one health condition is adjusted based on the age of each member.
- 67. (Currently Amended) The method of claim <u>49</u> [[50]], wherein the associated burden weight for at least one health condition is adjusted based on the gender of the member.
- 68. (Currently Amended) The method of claim <u>49</u> [[50]], wherein the associated burden weight for at least one health condition is adjusted based on an average incremental cost associated with a benchmark population.